

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
 US Department of Commerce
 United States Patent and Trademark
 Office, PCT
 2011 South Clark Place Room
 CP2/5C24
 Arlington, VA 22202
 ETATS-UNIS D'AMERIQUE
 in its capacity as elected Office

Date of mailing (day/month/year) 20 April 2001 (20.04.01)	
International application No. PCT/US00/19549	Applicant's or agent's file reference X-11121
International filing date (day/month/year) 26 July 2000 (26.07.00)	Priority date (day/month/year) 12 August 1999 (12.08.99)
Applicant KASSEBAUM, James, Web et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:
 09 February 2001 (09.02.01)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer Pascal Piriou Telephone No.: (41-22) 338.83.38
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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 31 OCT 2001

WIPO PCT

Applicant's or agent's file reference X-11121		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US00/19549	International filing date (day/month/year) 26/07/2000	Priority date (day/month/year) 12/08/1999	
International Patent Classification (IPC) or national classification and IPC A61K9/00			
Applicant ELI LILLY AND COMPANY et al.			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.


2. This REPORT consists of a total of 8 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 2 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☒ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 09/02/2001	Date of completion of this report 26.10.2001
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Hedegaard, A Telephone No. +49 89 2399 8644



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US00/19549

Re Section VIII

Certain observations on the international application

1. The word "about", particularly when applied to a range, detracts from the general clarity of claims 1 and 11 (Art. 6 PCT).
2. The use of brackets in claims 1-3 and 11 should be avoided since it leads to unclarity whether the figures in brackets are optional or compulsory (Art. 6 PCT).
3. Claim 11 contains a reference to the description (the Examples). According to Rule 6.2(a) PCT, claims should not contain such references except where absolutely necessary, which is not the case here.

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

<p>To:</p> <p>DEMETER, John C. ✓ ELI LILLY AND COMPANY Lilly Corporate Center Indianapolis, Indiana 46285 ETATS-UNIS D'AMERIQUE</p>	<p>RECEIVED</p> <p>NOV 07 2001</p> <p>ELI LILLY & COMPANY PATENT DIVISION</p> <p>PCT</p> <p>NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Rule 71.1)</p>
<p>Date of mailing (day/month/year) 26.10.2001</p>	
<p>Applicant's or agent's file reference X-11121</p>	
<p>IMPORTANT NOTIFICATION</p>	
<p>International application No. PCT/US00/19549</p>	<p>International filing date (day/month/year) 26/07/2000</p>
<p>Priority date (day/month/year) 12/08/1999</p>	
<p>Applicant ELI LILLY AND COMPANY et al.</p>	

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

<p>Name and mailing address of the IPEA/</p> <p>European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465</p>	<p>Authorized officer</p> <p>Hutterer, G</p> <p>Tel. +49 89 2399-8066</p>
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PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference X-11121		FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/US00/19549	International filing date (day/month/year) 26/07/2000	Priority date (day/month/year) 12/08/1999	
International Patent Classification (IPC) or national classification and IPC A61K9/00			
Applicant ELI LILLY AND COMPANY et al.			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 8 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 2 sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input checked="" type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input checked="" type="checkbox"/> Certain documents cited VII <input checked="" type="checkbox"/> Certain defects in the international application VIII <input checked="" type="checkbox"/> Certain observations on the international application 			
Date of submission of the demand 09/02/2001		Date of completion of this report 26.10.2001	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized officer Hedegaard, A Telephone No. +49 89 2399 8644	



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US00/19549

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, pages:

1-7,10-16 as originally filed

Claims, No.:

1-11 with telefax of 09/02/2001

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/19549

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

- ☐ the entire international application.
- ☒ claims Nos. 8-10.

because:

- ☒ the said international application, or the said claims Nos. 8-10 relate to the following subject matter which does not require an international preliminary examination (*specify*):
see separate sheet
- ☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):
- ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
- ☐ no international search report has been established for the said claims Nos. .

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

- ☐ the written form has not been furnished or does not comply with the standard.
- ☐ the computer readable form has not been furnished or does not comply with the standard.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims 1-11
	No: Claims
Inventive step (IS)	Yes: Claims
	No: Claims 1-11
Industrial applicability (IA)	Yes: Claims 1-7,11

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US00/19549

No: Claims

2. Citations and explanations
see separate sheet

VI. Certain documents cited

1. Certain published documents (Rule 70.10)

and / or

2. Non-written disclosures (Rule 70.9)

see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:
see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US00/19549

Re Section III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. Claims 8-10 relate to subject-matter considered by this Authority to be covered by the provisions of Rule 67.1(iv) PCT. Consequently, no opinion will be formulated with respect to the industrial applicability of the subject-matter of these claims (Article 34(4)(a)(i) PCT).

Re Section V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following documents:

D1: EP-A-0 128 351

D2: EP-A-0 069 269

D1 discloses (see the table on p. 21) a topical ectoparasiticide formulation comprising 0.2% cypermethrin (compound C) and 1.0% isopropyl myristate (synergist 4).

D2 discloses (see claim 1) topical ectoparasiticide formulations comprising 0.0001-90 % of the active agent and 10-80% of spreading agent. Example 1 on page 11 of D2 discloses a composition comprising 5% flumethrin (a pyrethroid) and 30.0% isopropyl myristate. On page 6, lines 10-11 of D2 it is disclosed that isopropyl myristate is particularly useful as spreading agent.

2. The subject-matter of claims 1-6 (formulation), 7 (article of manufacture), 8-10 (method) and 11 (formulation) is novel (Art. 33(2) PCT) since the combination of the features "about 0.1 to about 25 weight percent of an ectoparasiticide, selected from a spinosyn, or a physiologically acceptable derivative or salt thereof, and cyperpyrethrin" and "from about 25 to about 99.9 weight percent of a C₃-C₆

branched alkyl C₁₀-C₂₀ alkanoate spreading agent" has not been disclosed in the available prior art documents.

3. Document D1, which is considered to represent the most relevant state of the art, discloses (cf. above under item 1) a composition from which the subject-matter of claim 1 differs in that it comprises from **about 25 to about 99.9 weight percent** of the C₃-C₆ branched alkyl C₁₀-C₂₀ alkanoate spreading agent (instead of 1.0% as in D1).

The problem to be solved by the present invention may be regarded as providing insecticidal formulations that can be applied topically to animals and that permit the active ingredient to be better spread over the surface of the skin and/or the hair of the treated animal.

This problem is solved by incorporating from about 25 to about 99.9 weight percent of the spreading agent.

However, the use of 30.0% isopropyl myristate as spreading agent in pyrethroid formulations is known from e.g. D2. The skilled person would therefore regard it as a normal design option to include this feature in the composition described in document D1 in order to solve the problem posed and, thus, to arrive at a composition according to present claim 1. Therefore, the subject-matter of claim 1 does not involve an inventive step (Art. 33(3) PCT).

4. The same applies mutatis mutandis to independent claims 7, 8 and 11.
5. A positive international preliminary report for the subject-matter of the dependent claims 2-6 and 9-10 can only be established when they refer to independent claims which meet the requirements of the PCT.
6. For the assessment of the present claims 8-10 on the question whether they are

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US00/19549

industrially applicable, no unified criteria exist in the PCT Contracting States. The patentability can also be dependent upon the formulation of the claims. The EPO, for example, does not recognize as industrially applicable the subject-matter of claims to the use of a compound in medical treatment, but may allow, however, claims to a known compound for first use in medical treatment and the use of such a compound for the manufacture of a medicament for a new medical treatment.

Re Section VI

Certain documents cited

Certain published documents (Rule 70.10)

Application No Patent No	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
WO-A-00 29378	25.05.00	15.11.99	17.11.98 29.04.99

Although WO-A-00 29378 does not constitute prior art within the meaning of Rule 64.1(b) PCT, it could become of relevance in the regional phase.

No check has been made as to whether the priorities have been validly claimed.

Re Section VII

Certain defects in the international application

1. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1 and D2 is not mentioned in the description, nor are these documents identified therein.
4. The description is not in conformity with the claims as required by Rule 5.1(a)(iii) PCT.

09-02-2001

X-11121/3051-63308

00948749-7 US00/19549

CLMSPAMD

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CLAIMS

1. A topical ectoparasiticide formulation comprising: from about 0.1 to about 25 weight percent of an ectoparasiticide, selected from a spinosyn, or a physiologically acceptable derivative or salt thereof, and cyperpyrethrin; from about 25 to about 99.9 weight percent of a (C₃-C₆) branched alkyl (C₁₀-C₂₀) alkanolate spreading agent; and up to about 70 weight percent of a miscibilizing agent compatible with organic solvent systems.

2. A formulation of Claim 1 wherein the spreading agent is a (C₃-C₆) branched alkyl (C₁₂-C₁₆) alkanolate.

3. A formulation of Claim 2 wherein the (C₃-C₆) branched alkyl (C₁₂-C₁₆) alkanolate is isopropyl myristate.

4. A formulation of Claim 1, 2 or 3 wherein the miscibilizing agent is selected from formic, acetic, propionic, benzoic, butyric, valeric, caproic, enanthic, caprylic, pelargonic, capric, undecylic, lauric, tridecyllic, myristic, pentadecylic, palmitic, margaric, stearic, oleic, arachidic, behenic, lignoceric, cerotic, montanic, triacontanoic, psyllic, or ceroplastic acids.

5. A formulation of Claim 1, 2, 3 or 4, which further comprises a miscibilizing agent selected from benzyl alcohol, ethylene glycol phenyl ether, D-limonene, N-methyl-2-pyrrolidinone, methylated soybean oils and soybean oil methyl esters.

6. A formulation of Claim 1, 2, 3, 4 or 5 which further comprises an effective amount of an antimicrobial agent.

7. An article of manufacture, comprising packaging material and contained within said packaging material a topical formulation for controlling an ectoparasite infestation on a small ruminant or companion animal, wherein said formulation comprises

a topical unit dose of a formulation of Claim 1, 2, 3, 4, 5 or 6; and, wherein said packaging material comprises a label or package insert with instructions for topically administering the dose to the animal.

8. A method of controlling an ectoparasite infestation on a small ruminant or companion animal, comprising topically applying to the hair and/or skin

AMENDED SHEET

Printed 27-02-2001

09-02-2001

X-11121/3051-63308

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GLMSPAMD

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of the animal a formulation of Claim 1, 2, 3, 4, 5 or 6.

9. The method of Claim 8 wherein the formulation is applied using a spot-on protocol.

10. The method of Claim 8 wherein the formulation is applied using a pour-on protocol.

11. A topical ectoparasiticide formulation comprising from about 0.1 to about 25 weight percent of an ectoparasiticide, selected from spinosyn or a physiologically acceptable derivative or salt thereof, and cyperpyrethrin, from about 25 to about 99.9 weight percent of a (C₃-C₆) branched alkyl (C₁₀-C₂₀) alkanoate spreading agent, and up to about 70 weight percent of a miscibilizing agent compatible with organic solvent systems, substantially as hereinbefore described with reference to any one of the Examples.

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AMENDED SHEET

Printed 27-02-2001

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PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference X-11121	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 00/19549	International filing date (day/month/year) 26/07/2000	(Earliest) Priority Date (day/month/year) 12/08/1999
Applicant ELI LILLY AND COMPANY		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☒ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/19549

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K9/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

CHEM ABS Data, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 128 351 A (BAYER) 19 December 1984 (1984-12-19) claims 4,6 page 23; example 3 page 25; example 9 ---	1-3,5, 9-13
X	EP 0 069 269 A (BAYER) 12 January 1983 (1983-01-12) claim 1 page 5, line 5 -page 7, line 15 page 11; example 1 --- -/--	1-3,6,7, 9-13



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

21 November 2000

Date of mailing of the international search report

07/12/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
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Authorized officer

Ventura Amat, A

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/19549

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>DATABASE WPI Week 198721 Derwent Publications Ltd., London, GB; AN 1987-145349 XP002153469 & HU 41 238 A (NEHEZVEGYIPARI), 28 April 1987 (1987-04-28) abstract</p>	1-3, 9-13
X	<p>--- CHEMICAL ABSTRACTS, vol. 102, no. 3, 21 January 1985 (1985-01-21) Columbus, Ohio, US; abstract no. 19640, KIERAN, PETER JOHN ET AL: "Pour-on formulation for lice control" XP002153466 abstract & AU 83219 47 A (WELLCOME AUSTRALIA LTD., AUSTRALIA) 12 April 1984 (1984-04-12)</p>	1-3, 5, 9-13
X	<p>--- CHEMICAL ABSTRACTS, vol. 101, no. 11, 10 September 1984 (1984-09-10) Columbus, Ohio, US; abstract no. 85712, KIERAN, PETER JOHN ET AL: "Pyrethroids for combatting sheep ectoparasites" XP002153467 abstract & AU 82918 50 A (WELLCOME AUSTRALIA LTD., AUSTRALIA) 24 March 1983 (1983-03-24)</p>	1-3, 5, 9-13
X	<p>--- CHEMICAL ABSTRACTS, vol. 100, no. 7, 13 February 1984 (1984-02-13) Columbus, Ohio, US; abstract no. 47094, KIERAN, PETER JOHN ET AL: "Control of sheep lice" XP002153468 abstract & AU 81770 04 A (WELLCOME AUSTRALIA LTD., AUSTRALIA) 27 May 1982 (1982-05-27)</p>	1-3, 5, 9-12
P, X	<p>--- WO 00 29378 A (NOVARTIS) 25 May 2000 (2000-05-25) claims 22, 25 page 11, paragraph 7 -page 15, paragraph 1 page 82; example 5 -----</p>	1-13

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/19549

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 128351	A	19-12-1984	DE 3317823 A	22-11-1984
			AU 2806384 A	22-11-1984
			DK 241184 A	18-11-1984
			GR 82066 A	13-12-1984
			HU 34721 A	28-04-1985
			JP 59212403 A	01-12-1984
			PH 19050 A	11-12-1985
			ZA 8403680 A	24-12-1984
EP 69269	A	12-01-1983	DE 3125897 A	10-02-1983
			AT 21478 T	15-09-1986
			AU 560431 B	09-04-1987
			AU 8546682 A	06-01-1983
			DE 3272717 D	25-09-1986
			DK 294882 A	02-01-1983
			JP 1013681 B	07-03-1989
			JP 58008002 A	18-01-1983
			NZ 201086 A	11-04-1986
			PH 18948 A	14-11-1985
			ZA 8204663 A	27-04-1983
HU 41238	A	28-04-1987	NONE	
AU 8321947	A		NONE	
AU 8291850	A		NONE	
AU 8177004	A		NONE	
WO 0029378	A	25-05-2000	AU 1553100 A	05-06-2000

ARTICLE 34

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CLAIMS

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1. A topical ectoparasiticide formulation comprising: from about 0.1 to about 25 weight percent of an ectoparasiticide, selected from a spinosyn, or a physiologically acceptable derivative or salt thereof, and cyperpyrethrin; from about 25 to about 99.9 weight percent of a (C₃-C₆) branched alkyl (C₁₀-C₂₀) alkanooate spreading agent; and up to about 70 weight percent of a miscibilizing agent compatible with organic solvent systems.
2. A formulation of Claim 1 wherein the spreading agent is a (C₃-C₆) branched alkyl (C₁₂-C₁₆) alkanooate.
3. A formulation of Claim 2 wherein the (C₃-C₆) branched alkyl (C₁₂-C₁₆) alkanooate is isopropyl myristate.
4. A formulation of Claim 1, 2 or 3 wherein the miscibilizing agent is selected from formic, acetic, propionic, benzoic, butyric, valeric, caproic, enanthic, caprylic, pelargonic, capric, undecylic, lauric, tridecylic, myristic, pentadecylic, palmitic, margaric, stearic, oleic, arachidic, behenic, lignoceric, cerotic, montanic, triacontanoic, psyllic, or ceroplastic acids.
5. A formulation of Claim 1, 2, 3 or 4, which further comprises a miscibilizing agent selected from benzyl alcohol, ethylene glycol phenyl ether, D-limonene, N-methyl-2-pyrrolidinone, methylated soybean oils and soybean oil methyl esters.
6. A formulation of Claim 1, 2, 3, 4 or 5 which further comprises an effective amount of an antimicrobial agent.
7. An article of manufacture, comprising packaging material and contained within said packaging material a topical formulation for controlling an ectoparasite infestation on a small ruminant or companion animal, wherein said formulation comprises
a topical unit dose of a formulation of Claim 1, 2, 3, 4, 5 or 6; and, wherein said packaging material comprises a label or package insert with instructions for topically administering the dose to the animal.
8. A method of controlling an ectoparasite infestation on a small ruminant or companion animal, comprising topically applying to the hair and/or skin

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of the animal a formulation of Claim 1, 2, 3, 4, 5 or 6.

9. The method of Claim 8 wherein the formulation is applied using a spot-on protocol.

10. The method of Claim 8 wherein the formulation is applied using a pour-on protocol.

11. A topical ectoparasiticide formulation comprising from about 0.1 to about 25 weight percent of an ectoparasiticide, selected from spinosyn or a physiologically acceptable derivative or salt thereof, and cyperpyrethrin, from about 25 to about 99.9 weight percent of a (C₃-C₆) branched alkyl (C₁₀-C₂₀) alkanolate spreading agent, and up to about 70 weight percent of a miscibilizing agent compatible with organic solvent systems, substantially as hereinbefore described with reference to any one of the Examples.

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